rend continue to expand their presence in the power tool market and their latest entry is the T20 biscuit jointer. This is a standard example of the type, bearing a strong resemblance to the current Freud and other Freud clones.

The T20 is a 710W machine with a six-tooth TCT blade of 100mm diameter and 4mm kerf. Depth of plunge is set by a six-position rotating stop; three positions give the correct depths for the three standard biscuit sizes and three more, labelled 'A', 'B' and 'M', give greater depths. The switch is a simple 'ON/OFF' toggle mounted on the left-hand side of the body. This makes it very convenient for right-handed users but less so for left-handers.

The T20 has a 'front-flap' fence on which is mounted a right-angled rise and fall fence. The latter is used to set the height of cut for joining boards with right-angled edges, and can be removed for joints such as mitred corners if you choose to make the cut with the frontflap fence set to 45°. Setting is by means of a graduated scale from 0° to 90°, with pre-set indents for 0°, 45° and 90°.

A dust bag is provided, to attach to a take-off spout on the side of the machine, but for continual work connection to a dust extractor via a stepped hose connector is recommended.

Three spanners, a hex key, a hook spring and a bottle of lubricant are provided as standard for blade changing, fine adjustment of the depth settings, adjustment of the top handle and general maintenance of the machine.

A comprehensive instruction manual comes with the jointer and the whole kit is supplied in a moulded plastic case. Photo 2 shows the complete kit as it comes from Trend.



# Trend T20 biscuit **jointer**

Trend, the router and router accessory specialists, have now entered the biscuit jointer market with their new T20 model. Ron Fox gives it a try

#### The front fence

The two parts of the front fence, the rise-and-fall and the flap-front, are the main determinants of a biscuit jointer's accuracy and convenience in use. The riseand-fall fence on the T20 is a friction fit, which is pushed up and down against two scales on the flap fence and held in place by a locking lever. The fence has a tendency to slip unless the lever is fully tightened.

The build quality is not of the best and there was a chip out of the top edge of the fence

### Maintenance

Routine maintenance consists of keeping the plunge slideways lubricated, removing any deposits of resinous dust from the teeth of the blade and keeping the dust port clear. Trend also advise blowing dust from the motor about every two weeks, but this will, of course, depend on the amount of use the jointer gets.

In order to change the blade, or to gain access for cleaning out shavings etc., the motor carriage is slid out of the base casting. Two screws from a plastic cover have to be removed and two springs unhooked with the tool provided. I have had reports of people making very heavy weather of this but we had no difficulty. Photo 10 shows the motor/blade assembly separated from the base.



exactly where it ran against one of the scales, which did not help accurate alignment.

The front-flap fence is adjusted by loosening the knob on the left-hand side of the machine and pivoting the fence forward. We checked the accuracy of the three pre-set positions and found them to be acceptable. Photo 3 shows a front view of the jointer with the rise and fall fence, scales and locking lever clearly visible.

The other main factor determining the accuracy of the cuts is the alignment of the blade with the jointer base. The blade should be parallel to the bottom of the base casting and thus parallel to the workpiece. The base casting of the T20 is a one-piece item in which the motor carriage slides when the blade is plunged. No adjustment of the base is possible, but we

were satisfied that the cuts were acceptably parallel (we have seen worse in more expensive biscuit jointers).

A small bottle of oil is supplied to lubricate the plunge slide-ways by means of two holes in the upper surface of the base. This is a job which needs to be done little and often. The oil is thicker than the normal '3-in-1' type of lubricant and we would replace it, when it runs out, with engine oil or chain saw oil.

#### Making the cuts

The first step is to decide on the size of biscuit to be used. The instruction manual gives a very good grounding in biscuit jointing and this is one of the topics covered.

Having chosen biscuit size, the depth stop is rotated to the appropriate position and a test



cut made to check the actual depth of cut. Any adjustment necessary is made by turning a stop rod with a screwdriver while holding the locking nut with the 8mm spanner provided.

Photo 4 shows the depthsetting turret, the fine adjustment rod and the dust take off. A push-fit dust bag is provided, but for anything more than a few cuts we would connect the dust extractor to the spout.

For basic cuts such as to edge-joint boards, the next step is to set the rise-and-fall fence to give the required height of cut. Note that the scales give the height to the top of the cut. not the centre. The aim is to centre the cut but, unless vou are obsessive about it, you do not have to work to precision engineering standards. One of the great advantages of biscuit jointing is that it is so userfriendly. Since you are cutting from the face surface of each

board, the slots in the two boards will be accurately aligned even if they are not in the dead centre.

The board to be cut is now clamped to the worktable, the iointer held with one hand on the top handle and one holding the body, the cutting slot aligned with the mark on the board and the cutter plunged into the board. Most illustrations show the left hand on the top handle and the right hand holding the body with the thumb ready for the switch. A number of workers however. myself included, hold the jointer with the thumb of the left hand behind the top handle and the fingers over the top of the frontflap fence. Plunging is then accomplished by a combination of pushing with the right hand and squeezing with the left, with the left hand also pushing down on the jointer to hold the rise and fall fence level against the surface of the workpiece.







Photo 5 shows a cut being made in this fashion in a piece of kitchen worktop.

A very useful alternative method of cutting, when the board thickness permits, is to dispense with the rise and fall fence altogether and run the jointer with its base on the worktable. Photo 6 shows this operation. This method ensures that the jointer runs flat without wobble. The T20 has a solid base with no screws or access plates to be misaligned with the cutting slot so an accurate cut is assured. The bottom edge of the blade in the T20 cuts 10mm above the bottom of the base casting, so boards of 20mm or thereabouts lend themselves to this method of cutting.

#### The tests

We used the T20 to cut the full range of joints possible with a biscuit jointer. Some of the results are shown in photo 7. Note that the joint line of the corner butt joint is decorated with the Trend trimmer and Vgroove cutter. With edge jointed boards, the join is usually



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invisible after finishing so the example in photo 7 has been cut to reveal the biscuit.

Two specific cuts are shown in photos 8 and 9. Photo 8 illustrates a cut in a bookshelf upright to take the shelf end. The cut is made with the jointer standing on its nose, with a second board locating the jointer.

Photo 9 shows a cut being made in the 45° face of a mitred box corner. The method used is that recommended in the instruction manual: cutting from the outside face of the board with the rise and fall fence fitted and the front flap vertical. Note the 45° notch between the rise-and-fall fence and the front flap. The alternative method is to remove the rise and fall fence and set the front flap to 45°.

The full range of cuts is covered in the instruction manual which gives an excellent introduction to biscuit jointing in general as well as the use and maintenance of the T20. Some

# Further information

#### Price

List price of the T20 is £163.32 inc.VAT but it should be available from the discounters at about its pre-VAT price of £139.

Trend 0800 487363 www.trendmachinery.co.uk



# The verdict...

This is a fairly basic but adequate biscuit jointer. The build quality is not the best we have seen and the noise level, while not the highest we have encountered, calls for ear protection for all but the briefest use.

Nevertheless, the T20 carried out all the tests we asked of it, and the comprehensive instruction manual would get the beginner to biscuit jointing off to a good start.

The T20 faces stiff price competition from other equivalent models but the backing of the Trend network and the listing of a range of spare parts will help tip the balance for existing Trend customers.

early deliveries were made with a very brief uninformative manual and anyone who received one of these should be able to get it replaced by Trend. Alternatively, the manual is available as a download from the Trend website.



## On Test